US Army Corps of Engineers.

SAN FRANCISCO DISTRICT

PUBLIC NOTICE

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Regulatory Branch
333 Market Street
San Francisco, CA 94105-2197

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1. **INTRODUCTION:** Mr. Greg Sutter, c/o Wildlands, Inc., 3855 Atherton Road, Rocklin, California 95765 (916-435-3555), proposes to establish a vernal pool mitigation bank, named the North Suisun Mitigation Bank. This bank would be comprised of 1 parcel totaling 627 acres (APN 174-200-03). This parcel comprises the entirety of Section 36, township 5N, Range 1W of the Denverton USGS Quadrangle. The Mitigation bank is located between Creed Road and State Route 12, 4 miles east of Fairfield, Solano County, California (Figures 1 and 2). Possessors of wetland fill authorizations pursuant to the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344) could satisfy a portion or all of their mitigation requirements at the proposed bank.

2. **PROJECT DESCRIPTION:**

Wildlands, Inc., is proposing the establishment of the North Suisun Mitigation Bank (NSMB) near Fairfield, Solano County, California, to provide vernal pool preservation and creation credits for agency-approved impacts occurring within a defined service area. The U.S. Army Corps of Engineers (Corps) has verified a total of 127.1 acres of jurisdictional wetlands, including vernal pools, vernal swales, and drainages, as occurring on the NSMB site (Figure 3, 3a-3l). The southern 300 acres support a large playa pool approximately 37 acres in size, as well as natural mound-intermound topography and dense vernal pool-swale complexes. The northern 324 acres was leveled and dry-land farmed for many years, resulting in the loss of many natural pools and the degredation of many of the remaining pools. The site has been and continues to be used for grazing, and grazing will be maintained in the future as a compatible habitat management technique. While no exploration for natural gas has yet occurred on site, it may happen in the future. Any drilling will be limited to two 1.5 acre drill pads (Figures 3, 3c, 3h). No bank credits will be given to any work within these two pads or their access roads. As part of the NSMB establishment, over 90 acres of existing vernal pools will be preserved, as well as the 37 acres of other jurisdictional wetlands, contained in the playa pool.

Enhancement of the biological function of the site will result from the creation of 45.5 acres of vernal pools and swales (Figures 3, 3a-3l). Vernal pool creation will occur in the degraded northern portion of the site, on lands comprised of Antioch-San Ysidro soils. Post-construction total vernal pool density in the creation area will be similar to the density of pools in the undisturbed southern portion of the site. As described in the Conservation Strategy for the Vernal Pools of the Greater Jepson Prairie Ecosystem, the Antioch-San Ysidro Complex regionally supports vernal pool densities 25 percent higher than the total post-construction density on the creation site. The NSMB will be managed in perpetuity to sustain the vitality of the vernal pool habitats. Perpetual stewardship of the site will be financed by an endowment account dedicated to the monitoring, management and maintenance of the site.

Construction activities on the NSMB site will enhance the disturbed landscape through creation of new vernal pools in historic vernal pool habitat. The property was selected based upon the prevalence of biological resources in the undisturbed portions of the property, and the extensive restoration potential in the degraded areas onsite. Numerous field surveys have

been conducted on the site in 2003 and 2004 to identify and map the locations of sensitive biological resources. The existing vernal pools have been documented as supporting the federally listed endangered vernal pool fairy shrimp (*Branchinecta lynchi*), federally threatened vernal pool tadpole shrimp (*Lepidurus packardi*), and the California tiger salamander (*Ambystoma californiense*), which is proposed for federal listing. In addition, several plant species including the federally listed endangered Contra Costa goldfields (*Lasthenia conjugens*) and soft bird's-beak (*Cordylanthus mollis ssp. mollis*) occur in the existing vernal pools on site. Several project designs have been revised or eliminated, such as restoring existing smeared pools to a more natural state, to minimize direct impacts to the sensitive vernal pool species. The only direct impacts to vernal pools will occur through dry season crossing of a limited number of linear smeared pools, which will impact no more than 0.10 acre of total pool habitat. Direct impacts to vernal pool soils will be reduced through the installation of temporary vernal pool crossing pads, and no fill will be placed into existing pools. Construction techniques will reduce impacts to these pools, and eliminate the potential for indirect impacts.

Vernal pool construction will require the use of heavy construction equipment (e.g., D-5 bulldozer, 623 scraper, John Deere grader, and water trucks). Equipment movement on the project site will avoid all vernal pools except where crossings of linear smeared pools are required to achieve site access. Prior to the initiation of construction activities, a Wildlands restoration ecologist will survey the project site to identify the appropriate measures to avoid vehicle impacts to vernal pools. Where necessary, isolated pools will be marked in the field with high visibility material such as pin flags or brightly marked survey lathe. In areas of high pool density, the restoration ecologist may designate haul routes to avoid impacts to pools. If haul routes are selected, the routes will be identified on construction drawings and marked with high-visibility materials in the field. The access routes will avoid vernal pools to the greatest extent possible, and minimize the number of crossing of linear smeared pools. When possible, crossing locations will be at the narrowest width of the linear smeared pools. To minimize ground disturbance, and potential impacts to fairy shrimp cysts or vernal pool plant seeds, the linear smeared pool crossing locations will be covered with geotech matting and six inches of native grass straw. These crossing pads will eliminate friction between vehicle treads or tires and the vernal pool topsoil. The native grass straw will eliminate the introduction of invasive species into the existing vernal pools.

Creation of vernal pools will occur only in areas that were previous graded or subject to dry-land farming. The vernal pools that occur within the construction areas have been degraded, and the density of sensitive species identified on the property is substantially lower within these pools. However, to eliminate impacts to watersheds of existing pools, new pools will be constructed no closer than 50 feet from existing pools or other jurisdictional waters of the U.S. Created pools and swales designed to be hydrologically connected to existing pools, and upland mounds, placed near existing pools to direct runoff, will occur no closer than 10 feet to an existing wetland. Constructed pools will range between 8 and 14 inches in depth. Constructed upland mounds will average 8 to 12 inches in height, and will in no circumstances exceed 18 inches. Construction will occur in summer to avoid issues with runoff or unintended impacts to soils.

To minimize impacts to California tiger salamanders, surveys were conducted during winter 2003-2004, to identify all aestivation habitat within 2000 feet of suitable breeding habitat. Existing gopher burrows were identified as being potential aestivation habitat. All gopher burrow locations were mapped using GPS equipment. Creation pool locations were adjusted so that no pools are to be constructed within 50 feet of existing gopher burrows. Within two weeks of the initiation of construction, habitat within 2000 feet of known California tiger salamander breeding habitat will be reinspected for the presence of gopher burrows. If new burrows are detected within 50 feet of a pool construction location, the vernal pool creation site will be relocated to an area at least 50 feet away from a visible burrow. If a subterranean burrow is detected during grading for the pool, the construction will be suspended while the burrows are surveyed for the salamander. If salamanders are detected, the pool construction site will be abandoned

and the burrow will be carefully reburied using hand tools.

Construction of vernal pools will require the excavation of upland soils to create ponding locations. Many facultative wetland and facultative species have been observed in the upland areas where vernal pool creation will occur. Therefore, the initial top two inches of soil will be salvaged, stockpiled, and returned to the constructed pools to provide a topsoil medium inoculated with an existing seedbank. Where possible, the stockpile locations will be placed more than 50 feet from existing pools, and will be surrounded with silt fencing or native grass straw wattles. Careful application of water to the stockpiles soils will reduce the potential for air quality contamination by fugitive dust while minimizing the potential trigger for plant growth in the captured seedbank. Watering of other exposed soils related to construction activities will be necessary for dust control and soil compaction. Water application will be directed away from vernal pools to avoid triggering vernal pool species growth outside of the normal growing season.

Created mounds, constructed to direct water flow, will be compacted with a sheeps-foot or similar machinery to minimize soil erosion. Post construction, any upland areas of exposed soils will be treated with a native grassland seed mix, soil tackifier, and native grass straw mulch. Created vernal pools will be inoculated with the salvaged topsoil as well as with material collected through mowing and vacuuming existing pools. The dry thatch material will be collected from no more than 15 of the 90 acres of existing pools on the property. The inoculum collection will only occur from pools, identified as not supporting sensitive vernal pool plant species. Only rubber-tired equipment will be used for this activity so that pool bottoms will not be altered.

All construction staging activities will occur within a designated staging area, to be identified by the restoration ecologist. This site will be located no closer than 250 feet to any existing vernal pool or other jurisdictional wetlands habitat, and will be marked in the field and on the construction plans. All refueling and maintenance activities will occur within the staging area. Any spill of hazardous materials will be cleaned up immediately, in accordance with all federal, state and local regulations. Additional measures to minimize impacts to the site will be identified in the Storm Water Pollution Prevention Plan, which will be prepared and implemented prior to the initiation of construction.

Prior to the start of construction, Wildlands' restoration ecologist will conduct a worker environmental awareness training program for construction personnel. This training will provide workers with information on their responsibilities with regard to listed species and an overview of the life-history of the species and description of the preserve area. Written documentation of the training shall be transmitted to the Sacramento U.S. Fish and Wildlife Service office within 30 days of the completion of the training. The Wildlands' restoration ecologist will be on site daily to ensure construction activities comply with all of the project's environmental commitments.

The preserved, constructed, and restored wetlands would be sold to persons requiring seasonal wetland or vernal pool mitigation as a condition for a Department of the Army, Regional Water Quality Control Board (RWQCB), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), or other permits. The bank would be administered pursuant to a Bank Enabling Instrument between Wildlands, Inc., the U.S. Army Corps of Engineers (USACE), the U.S. Environmental Protection Agency (USEPA), the USFWS, and the CDFG.

The bank's proposed service area includes portions of Solano, Yolo, Colusa, and Glenn Counties, but most users are anticipated to be permittees in Solano County (Figure 4). The bank would be amended to authorize the sale of California tiger salamander credits, if this species becomes federally listed. The detailed restoration plan is available for review at the Corps' office.

When completed, Wildlands will grant a conservation easement over the site to Solano Land Trust. A management endowment will be deposited with either the California Department of Fish and Game or

the Habitat Stewardship Foundation at Western Sierra Bank, to cover long-term costs of management and maintenance.

3. **SUBMISSION OF COMMENTS:** Interested parties may submit in writing any comments concerning this activity. Comments should include the proponents' names, the number, and the date of the notice and should be forwarded as to reach this office within the comment period specified on page one of this notice. Comments should be sent to the Regulatory Branch. It is Corps policy to forward any such comments, which include objections, to the proponents for resolution or rebuttal. Additional details may be obtained by contacting the proponent, whose address is indicated in the first paragraph of this notice, or by contacting Philip Shannin of our office at telephone 415-977-8445 or by e-mail at pshannin@spd.usace.army.mil. Details on any changes of a minor nature, which are made in the final mitigation bank documents, will be provided on request.